

Thomas Maddux
Metal Plate Polishing
2413 Meyer Road
Fort Wayne, Indiana 46803

Re: Registered Operation Status,
003-11710-00233

Dear Thomas Maddux:

The application from Metal Plate Polishing received on December 27, 1999, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following decorative chrome electroplating operation, located at 2413 Meyer Road in Fort Wayne, Indiana, is classified as registered:

- (a) One trivalent chromium electroplating tank
- (b) One natural gas fired or #2 fuel oil fired boiler, designated as B1, rated at 5.25 MMBTU per hour, exhausting to stack S1.
- (c) One horizontal above ground storage tank, with a capacity of 280 gallons, storing #2 fuel oil.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Indirect Heating Sources), the PM emissions from the natural gas or #2 fuel oil boiler shall not exceed 0.6 pounds per million BTU heat input.

The chrome electroplating tank is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.340 - 347, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in

40 CFR 63 Subpart N.

The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:

- (a) This decorative chrome electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to 40 CFR 63.342(e).
- (b) Pursuant to 40 CFR 63.346(b)(14), for sources complying with 63.342(e), the owner or operator shall maintain records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components.
- (c) The chromium electroplating operations shall be subject to the reporting requirements in 40 CFR 63.347(i).

This registration is a total source registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

drp

cc: File - Allen County
Allen County Health Department
Air Compliance - Jennifer Schick
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	Metal Plate Polishing
Address:	2413 Meyer Road
City:	Fort Wayne
Authorized individual:	Thomas Maddux
Phone #:	219-422-5426
Registration #:	003-11710-00233

I hereby certify that **the decorative chrome electroplating operation** is still in operation and is in compliance with the requirements of Registration **003-11710-00233**.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Metal Plate Polishing
Source Location: 2413 Meyer Road, Fort Wayne, Indiana 46803
County: Allen
SIC Code: 3471
Operation Permit No.: 003-11710-00233
Permit Reviewer: drp

The Office of Air Management (OAM) has reviewed an application from Metal Plate Polishing relating to the operation of a decorative chrome electroplating operation. This operation uses trivalent chrome with a wetting agent. This type of operation was required to obtain a registration pursuant to rule 326 IAC 2-5.1-2 (a)(2)(B). This rule states, "... this section applies to the following new sources, any source that consists of only decorative chromium electroplating tanks that use a trivalent chromium process that incorporates a wetting agent." The operation consists of:

- (a) One trivalent chromium electroplating tank
- (b) One natural gas fired or #2 fuel oil fired boiler, designated as B1, rated at 5.25 MMBTU per hour, exhausting to stack S1.
- (c) One horizontal above ground storage tank, with a capacity of 280 gallons, storing #2 fuel oil.

The boiler and above ground storage tank had been previously covered by Registration 003-4852 issued on October 3, 1995.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 27, 1999.

Emission Calculations

Chromium emissions (in the single HAP category) from the largest source in Indiana has been determined to be less than 10 tons per year. This operation is a much smaller source in comparison to this largest source. No calculations were made related to the chromium emissions because this source was determined to need a registration based upon the source type (a chromium electroplating operation) and not the amount of emissions from the source as is the usual case.

See Appendix A of this document for detailed emissions calculations for the boiler. (pages 1 and 2)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.3
PM-10	0.3
SO ₂	11.7
VOC	0.1
CO	1.9
NO _x	3.3

HAPs	Potential to Emit (tons per year)
Chromium Compounds	Less than 10
TOTAL	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The existing source is subject to 326 IAC 20-8 and subject to 326 IAC 2-5.1-2 as noted earlier. Additionally, including the boiler and the storage tank, makes this a total source registration.

County Attainment Status

The source is located in Allen County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Note: This chrome electroplating operation is being considered an existing source. It is not new construction. Previously, this type of source was not covered by the permit rules. Under the new rules, instituted December 25, 1998, the source type (chrome electroplating) was required to obtain either a registration or minor source operating permit. This source is fulfilling this requirement by obtaining this registration.

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.3
PM10	0.3
SO ₂	11.7
VOC	0.1
CO	1.9
NO _x	3.3

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only

after issuance of this registration.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Electroplating	-	-	-	-	-	-	< 10/25
Boiler*	0.3	0.3	11.7	0.1	1.9	3.3	Neg.
Total Emissions*	0.3	0.3	11.7	0.1	1.9	3.3	< 10/25
PSD Levels	250	250	250	250	250	250	10/25

* The emissions from the #2 fuel oil storage tank have been determined to be negligible.

This existing minor stationary source is not major because the emissions are less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

Federal Rule Applicability

- (a) New Source Performance Standard Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units is not applicable to the natural gas fired boiler. The rule has an applicability floor value for capacity of 10 MMBTU/hr. The boiler has a capacity of 5.25 MMBTU/hr. Therefore, this boiler is below the applicability of this rule.

New Source Performance Standard Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 is not applicable to the storage tank. The rule has an applicable floor value for capacity of 40 cubic meters. The storage tank has a capacity of 280 gallons (1 cubic meter). Therefore, this storage tank is below the applicability of this rule.

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

- (b) The chrome electroplating tank is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.340 - 347, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart N.

The chromium electroplating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 326 IAC 14, (40 CFR 63, Subpart N, and 326 IAC 20-1-1). Pursuant to 40 CFR 63, Subpart N, and 326 IAC 20-1-1, the chromium electroplating operations are subject to the following conditions:

- (1) This decorative chrome electroplating tank that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient is subject to 40 CFR 63.342(e).
- (2) Pursuant to 40 CFR 63.346(b)(14), for sources complying with 63.342(e), the owner or operator shall maintain records of the bath components purchased, with the wetting agent clearly identified as a bath constituent contained in one of the components.
- (3) The chromium electroplating operations shall be subject to the reporting requirements in 40 CFR 63.347(i).

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and the potential to emit of any of the criteria pollutants is less than one hundred tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Particulate Emission Limitations for Indirect Heating Sources)

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Indirect Heating Sources), the PM emissions from the natural gas or #2 fuel oil fired boiler shall not exceed 0.6 pounds per million BTU heat input. The boiler will meet this rule.

Conclusion

The operation of this decorative chrome electroplating operation shall be subject to the conditions of the attached proposed Registration 003-11710-00233.